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REMARKS

The Applicant acknowledges the Office's re-issuance of the final rejection. The re-issued Office Action was mailed on February 17, 2005, which reset the shortened statutory deadline for responding to the Office Action. This communication is considered fully responsive to the re-issued Office action mailed February 17, 2005. Claims 1-9 and 12-29 were examined and stand rejected. No claims are cancelled (although claims 10-11 were previously cancelled). No new claims are added. Claims 1, 8, 20, and 25 are amended to correct grammatical errors and provide consistent use of "said" and "the". Claim 28 is also amended to provide proper antecedent basis for the term "group of port information" and to clarify the Markush-type recitation. Although the Applicant believes claim 29 to be grammatically correct, claim 29 is also amended to further clarify the claim. Reconsideration and reexamination is requested.

Interview Summary

The Applicant expresses sincere appreciation for the telephonic examiner interview conducted between the Examiner and the Undersigned, Richard J. Holzer, Jr., on January 13, 2005. Attorney Ron Gorsche was also in attendance with the Undersigned.

During the interview, the differences between the Walker and Nulu references and the differences between the cited references and the claimed invention were discussed. The Undersigned explained that the cited references do not disclose all of the recited features of the independent claims. The Undersigned also explained that it is improper to combine the network topology display of Walker with the resource tree features of Nulu. However, as the parties were going through the independent claims, it became apparent that the Office had failed to provide a specific rejection for claim 20, at which point the Examiner explained that she would re-issue the Office action.

Consideration of Applicant-submitted References

The Applicant has submitted Information Disclosure Statements on September 12, 2003 and June 9, 2004 but has received no record that the references listed therein have been considered by the Office. Accordingly, the Applicant requests that copies of the

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previously submitted Forms PTO-1449 be returned to the Applicant with the Examiner's initials indicating the Office's consideration of each reference.

Claim Objections

The Office has objected to claim 29 on the grounds that the Office believes there to be a grammatical error in the language of the claim. However, the Applicant submits that the claim is grammatically correct in its current state. Nevertheless, the Applicant has amended the claim to further clarify the recitation. If the Office could be more explicit in its objection, the Applicant would consider amending the claim further to clear up any perceived grammatical problems.

Claim Rejections – 35 U.S.C. §112, second paragraph

The Office has rejected claims 28 and 29 under 35 U.S.C. §112, second paragraph, as being purportedly indefinite for failing to point out and distinctly claim the subject matter that the Applicant regards as the invention. Claim 28 has been amended to provide proper antecedent basis for the specified term.

As for claim 29, the Applicant is uncertain what aspect of the claim the Office objects to, unless the amendments to claims 28 and 29 have already cleared up such problems. If the Office could be more explicit in its objection, the Applicant would consider amending the claim further to clear up any perceived Section 112, second paragraph, problems.

Claim Rejections – 35 U.S.C. §103(a)

Claims 1-4, 7-9, 14-15, and 18-21 stand rejected under 35 U.S.C. §103(a) as being purportedly unpatentable over U.S. Patent No. 6,594,696 to Walker et al. ("Walker") in view of 6,650,347 to Nulu et al. ("Nulu"). The Applicant respectfully traverses the rejections.

Generally, Walker discloses displaying "object tips" in a network topology display. Using the system of Walker, a user may obtain data about a device or link in the network. However, Walker does not disclose or suggest including port information in an object tip associated with a device. In contrast to the network topology display of Walker, Nulu discloses a software tool providing a resource tree that lists individual

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resources within a discrete piece of hardware. Using the system of Nulu, a user may configure individual resources within the piece of hardware but cannot view the network topology.

The Applicant respectfully submits that the Office has failed to establish a prima facie case of obviousness relative to claim 1 and the other claims. The Office bears the initial burden of factually supporting any prima facie conclusion of obviousness. To meet this burden, the Office must show (1) some suggestion or motivation to combine the reference teachings; (2) a reasonable expectation of success; and (3) that the combined references teach or suggest all of the claimed features. The Office has failed to meet all three of the criteria.

The apparent extent of the Office's attempt to show some suggestion or motivation to combine the reference teachings amounts to the conclusion that it would have been obvious to combine the features of the references "to provide users with architectural perspectives that are rapidly obtainable." Final Office Action, page 4. However, the Office provides no explanation of how this objective addresses a problem suggested or motivated by the references or a combination thereof or how this objective could even be reasonably achieved by a combination of the references. The term "architectural perspectives" is used in Nulu to describe the internal architecture of a "box" or hardware device. In contrast, Walker's system is directed to interconnections between network devices, not architectural perspectives. Rather than displaying what exists within a hardware device, the network topology display of Walker displays what links multiple boxes. Accordingly, the Office's remarks fail to show any suggestion or motivation to combine the references, particularly to provide users with architectural perspectives that are rapidly obtainable.

Nevertheless, to support its conclusion, the Office describes Nulu as teaching "a computer-implemented method of displaying device port information in a hardware topology display". Final Office Action, pg. 4, lines 3-4. The Applicant respectfully submits that the term "hardware topology display" is not found in Nulu and the Office's use of the term appears to be an attempt to textually imply some similarity between the cited references. However, the Office's proposed use of the term "topology" perverts the term's ordinary use, which relates to interconnections of network devices, and further

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conflicts with the use of the term in the context of Walker's network topology. Nulu merely discloses a resource tree of resources internal to a hardware device, not a network topology display, and nothing in the Office's remarks or the cited references explains any suggestion or motivation for combining these two distinct types of structures.

Furthermore, the Office also suggests that Walker teaches expanding a displayed device node in a tree view of device connections. Once again, the Office appears to be using the term "tree view" (without any support from the reference itself) in an attempt to textually imply some similarity between the cited references. However, the Office's proposed use of the term "tree" to describe a network topology is unsupported and inappropriate, particularly in light of the descriptions in Walker and Nulu.

Notwithstanding the Office's remarks, the proposed combination is simply not suggested or motivated by the cited references. The Office ignores the explicit differences between Nulu's tree of resources within a hardware device and Walker's network topology display. A network topology display is described in Walker using the following language:

Thus, as shown in FIG. 2, the network management station 3A displays a graphical representation 17 of the network topology, identifying each network device (PC, hub, switch, etc) by an appropriate icon which depicts an image of the device, and the network links which connect the network devices, by continuous lines connecting the relevant icons on the graphical representation 17 or map.

Walker, col. 4, lines 7-12. In stark contrast, a resource tree is disclosed by Nulu as a hierarchical listing of hardware resources within a given hardware device. Nulu neither discloses nor suggests any display of a network topology, individual network devices within a network topology, images of such devices, or network links connecting such devices. Instead, Nulu's resource tree is limited to an "architectural perspective" of resources within a single device. As such, the Office has failed to provide any showing as to why one of ordinary skill in the art would be motivated to combine the network topology display features of Walker with the resource tree features of Nulu.

In addition, the Applicant submits that one of ordinary skill in the art would not be motivated to combine the teachings of the references because the displayed device nodes in Walker are already "expanded," at least in the sense that Nulu shows expansion (see e.g., FIG. 4 showing S1000-1-72 with 3 ports and HUB10-1-72 with 4 ports). The

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Office has failed to show any reason why one of ordinary skill in the art would be motivated to combine the teachings of Walker and Nulu if there is no "expansion" available in a Walker device node.

Regarding the criterion of showing a reasonable expectation of success, the Office makes no attempt to provide an explanation of a reasonable expectation of success. The Applicant submits that Walker and Nulu cannot be combined because the Walker device nodes cannot be expanded in the sense that Nulu expands its resource tree entries – the Walker devices are already "expanded" in the Nulu sense.

Moreover, the Office has failed to show that the combined references teach or suggest all of the claimed features of claim 1. Claim 1 recites, among other features, "displaying a device node in a network topology display" and "selectively expanding the displayed device node in response user selection of the device node, wherein the expanded node include port information for each of the one or more ports having a connection to another device in the network." The Office argues that Walker teaches all of the recited features of claim 1 except expansion of the displayed node in response to a user selection of the displayed node. The Applicant earnestly asserts that Walker further fails to teach any of the recited "selectively expanding" operation, particularly in light of the "displaying" operation.

Specifically, Walker fails to disclose or suggest both expanding a displayed device node in a network topology display as well as an expanded node that includes port information for each of the one or more ports having a connection to another device in the network. The Office appears to assert that the object tips displayed in Walker constitute the recited port information, but this assertion simply ignores recited features in the claim.

First, Walker only discloses tips relating to two distinct types of objects: (1) links and (2) devices, and neither type of tip constitute an expanded node including port information. A "link" tip in Walker is triggered in response to selection of a link and includes a port number for one port connected to the link. Nevertheless, claim 1 conditions expansion on selection of a displayed device node, which excludes a link tip as port information included in an expanded node. In contrast, a "device" tip in Walker is

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triggered in response to selection of a device but does not include any port information. The only information disclosed as being displayed in a device tip is a device name.

Second, neither type of tip displays port information about "each of the one or more ports [of the connection device] having a connection to another device in the network". No "device tip" is disclosed as displaying port information about each connected port of a device in an expanded node and a device tip is described only as including a device name. Even "link" tips offer only a port number for a single port and this port number is not included in an expanded node. As such, not only does Walker fail to disclose or suggest expanding a displayed node in a network topology, it also fails to disclose or suggest that the expanded node includes port information in response to user selection of the device node.

The Applicant notes that the Office rejected Applicant's previous arguments relating to each of the one or more ports having a connection to another device in the network, stating that Walker teaches displaying port information for a selected node for a port that is connected. See page 12 of the Final Office Action. However, the Applicant strenuously disputes the Office's statement. Walker teaches displaying link information for a selected link, but the link information is not relevant to this claim as it does not relate to a selected node. In contrast, Walker teaches displaying device information for a selected device, but the object tip for a device is not disclosed as including any port information whatsoever – only the device name.

The Office also argues that Walker discloses that "information for each and every port is displayed as a tool tip and is dependent on at which end of the link the pointer is held". But this argument is irrelevant to claim 1, which recites:

- (1) expanding the displayed device node in response to a user selection of the device node;
- (2) wherein the expanded node include port information for each of the one or more ports having a connection to another device in the network.

The Office's argument appears to suggest that a user could sequentially select individual links to eventually display port information for all of the connected ports of a given device, but even this reading of Walker does not disclose the recited features of claim 1. Walker's link tips are not "expanded" in response to a user selection of a device

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node, and neither type of tip provides port information about each connected port of the selected device. Further, the expanded node recited in claim 1 includes port information for each connected port of a device, which is triggered by selection of the device node. Even selection of a link only provides a port number for a single port in Walker, and therefore does not constitute a selected node. Therefore, even if the Office asserts that a link tip is an expanded node, a link tip fails to display port information for each of the connected ports in response to a user selection of the device node.

The Office further argues that Nulu discloses the recited claim features missing from Walker. The Applicant respectfully asserts that Nulu also fails to disclose or suggest expanding a displayed device node in a network topology display, as Nulu only discloses a resource tree that does not display a network, a displayed device node in a network topology display, or connection paths coupling ports of the displayed device node to other devices in the network. Nulu's resources are merely resources within a piece of hardware, independent of any network topology or network topology display. That Nulu discloses expanding and contracting resource tree's entries does not mean that Nulu discloses or suggests expanding a displayed device node in a network topology display – an entry in a mere hierarchical list does not constitute a displayed device node in a network topology display. As such, Nulu fails to disclose or suggest the recited claim features missing from Walker.

Claims 2-4 and 7 depend from claim 1, which is believed allowable. Therefore, claims 2-4 and 7 are believed allowable for at least the same reasons as claim 1. Allowance of claims 2-4 and 7 is therefore requested.

Claim 8 recites similar features as claim 1, which is believed allowable. Therefore, claim 8 is believed allowable for at least the same reasons as claim 1. Allowance of claim 8 is therefore requested.

Claims 9, 14-15, and 18-19 depend from claim 8, which is believed allowable. Therefore, claims 9, 14-15, and 18-19 are believed allowable for at least the same reasons as claim 1. Allowance of claims 2-4 and 7 is therefore requested.

Claims 20 recites "the port information comprising an indication of the ports having an actual connection to another device in the network and the ports having no connection to the network". The Office fails to show any teaching of this recited feature

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in either Nulu or Walker but merely claims the feature is inherent in some unspecified reference. The Applicant cannot guess the reference upon which the Office is relying because the Office has confused the display structures of both Nulu and Walker, incorrectly calling both structures a "topology". If the Office wishes to sustain this rejection upon one of the cited references, it is required to specify the reference and provide a detailed explanation of how that reference discloses or teaches the recited claim features.

In anticipation that the Office will submit Walker as the basis of this rejection, the Applicant respectfully submits that Walker fails to disclose several features in claim 20 and, further, that the Office has failed to support its arguments of "inherency". First, Walker only displays a link tip containing a port number upon selection of a link. Second, the link tip does not display port information for "each of the ports of a device node, which is recited in claim 20. Third, Walker neither discloses nor suggests any display of port information for both connected and unconnected ports. The only ports shown in Walker are connected to other devices ("identifying each network device (PC, hub, switch, etc) by an appropriate icon which depicts an image of the device, and the network links which connect the network devices", Walker, col. 4, line9-12). It does not "necessarily follow" that displaying port information is a deliberate and necessary consequence of Walker's disclosure, and in fact, it is likely from the quoted language that only connected links (and therefore ports) are displayed in Walker – unconnected ports are hidden.

In fact, although it is less than clear from Walker's disclosure, one might infer that the displayed devices in Walker's network topology displayed include more ports than are displayed, in that one link tip is revealed to be connected to "Port 12" (Walker, col. 5, line 28 and FIG. 5) but the device is shown with only four links (i.e., to four ports). As such, it is unlikely that display of port information for unconnected ports is a deliberate and necessary consequent of Walker, because Walker appears to deliberately hide unconnected ports. Therefore, the Office has made no showing in support of its assertion of inherency.

Furthermore, as claim 20 has distinctly different claim elements as claims 3-4, the Applicant also submits that the rejection of claim 20 using similar rationale as claims 3-4

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is improper. Nevertheless, claims 3-4 depend from claim 1, which is believed allowable. Therefore, claims 3-4 are believed allowable for at least the same reasons as claim 1. To the extent that there is any similarity between claim 20 and claim 1, claim 20 is also believed allowable for the previously discussed reasons relating to those similarities.

For the foregoing reasons, the Applicant requests that the rejection of claim 20 be withdrawn. Allowance of claim 20 is respectfully requested.

Claims 5, 6, 12, 13, 23-26, and 28 stand rejected under 35 U.S.C. §103(a) as being purportedly unpatentable over U.S. Patent No. 6,594,696 to Walker et al. ("Walker") in view of U.S. Patent No. 6,650,347 to Nulu et al. ("Nulu") and in further view of U.S. Patent No. 5,261,044 to Dev et al. ("Dev"). The Applicant respectfully traverses the rejections.

Claims 5-6 depend from claim 1, which is believed allowable. Therefore, claims 5-6 are believed allowable for at least the same reasons as claim 1. Allowance of claims 5-6 is therefore requested.

Claims 12-13 depend from claim 8, which is believed allowable. Therefore, claims 12-13 are believed allowable for at least the same reasons as claim 8. Allowance of claims 12-13 is therefore requested.

Claims 23-24 depend from claim 20, which is believed allowable. Therefore, claims 23-24 are believed allowable for at least the same reasons as claim 20. Allowance of claims 23-24 is therefore requested.

Claim 25 is an independent claim that the Office submits is similar in scope to claim 13, which is believed allowable for at least the same reasons as claim 1. To the extent that there is any similarity between claim 25 and claims 1 and 13, claim 25 is also believed allowable for the previously discussed reasons relating to those similarities. Furthermore, as claim 25 has distinctly different claim elements as claims 1 and 13, the Applicant also submits that the rejection of claim 25 using similar rationale as claim 13 is improper. For the foregoing reasons, the Applicant requests that the rejection of claim 25 be withdrawn. Allowance of claim 25 is therefore requested.

Claims 26 and 28 depend from claim 25, which is believed allowable. Therefore, claims 26 and 28 are believed allowable for at least the same reasons as claim 25. Allowance of claims 26 and 28 is therefore requested.

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Claims 16-17 also stand rejected under 35 U.S.C. §103(a) as being purportedly unpatentable over U.S. Patent No. 6,594,696 to Walker et al. ("Walker") in view of U.S. Patent No. 6,650,347 to Nulu et al. ("Nulu") and in further view of U.S. Patent No. 5,261,044 to Dev et al. ("Dev"). The Applicant respectfully traverses the rejections.

Claims 16-17 depend from claim 8, which is believed allowable. Therefore, claims 16-17 are believed allowable for at least the same reasons as claim 8. Allowance of claims 16-17 is therefore requested.

Claim 22 stands rejected under 35 U.S.C. §103(a) as being purportedly unpatentable over U.S. Patent No. 6,594,696 to Walker et al. ("Walker") in view of U.S. Patent No. 6,650,347 to Nulu et al. ("Nulu"), as applied to claim 20. The Applicant respectfully traverses the rejection.

Claim 22 depends from claim 20, which is believed allowable. Therefore, claim 22 is believed allowable for at least the same reasons as claim 20. Allowance of claim 22 is therefore requested.

Claim 27 stands rejected under 35 U.S.C. §103(a) as being purportedly unpatentable over U.S. Patent No. 6,594,696 to Walker et al. ("Walker") in view of U.S. Patent No. 6,650,347 to Nulu et al. ("Nulu") and U.S. Patent No. 5,261,044 to Dev et al. ("Dev"), and in further view a reference identified as "Simpson". The Office has not specifically identified the "Simpson" reference, but the Applicant makes a good faith effort to respond to the rejection using the only "Simpson" reference on record, U.S. Patent No. 5,179,550. The Applicant respectfully traverses the rejections.

Claim 27 depends from claim 25, which is believed allowable. Therefore, claim 27 is believed allowable for at least the same reasons as claim 25. Allowance of claim 27 is therefore requested.

Claim 29 stands rejected under 35 U.S.C. §103(a) as being purportedly unpatentable over U.S. Patent No. 6,594,696 to Walker et al. ("Walker") in view of U.S. Patent No. 6,650,347 to Nulu et al. ("Nulu") and U.S. Patent No. 5,261,044 to Dev et al. ("Dev"), and in further view a reference identified as "Bare". The Office has not specifically identified the "Bare" reference, but the Applicant makes a good faith effort to respond to the rejection using the only "Bare" reference on record, U.S. Patent No. 6,473,403. The Applicant respectfully traverses the rejections.

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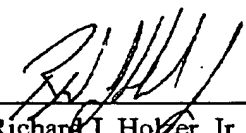
Claim 29 depends from claim 25, which is believed allowable. Therefore, claim 29 is believed allowable for at least the same reasons as claim 25. Allowance of claim 29 is therefore requested.

Conclusion

Based on the amendments and remarks herein, the Applicant respectfully requests prompt issuance of a notice of allowance for claims 1-9 and 12-29 in this matter.

Respectfully Submitted,

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